

***Boswellia odorata* Hutch.**

and *B. occidentalis* Engl. (*Burseraceae*), syn. nov.

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Summary : *Boswellia odorata* Hutch. is based on a mixture of *B. dalzielii* Hutch. and *B. papyrifera* (Del.) A. Rich. ; *B. occidentalis* Engl. is a synonym of *B. papyrifera* (Del.) A. Rich.

Résumé : *Boswellia odorata* Hutch. est basé sur un mélange de *B. dalzielii* Hutch. et *B. papyrifera* (Del.) A. Rich. ; *B. occidentalis* Engl. est un synonyme de *B. papyrifera* (Del.) A. Rich.

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When working on a field guide (GEERLING, 1982) to the woody plants of the West African savanna and Sahel, problems were encountered in the genus *Boswellia* Roxb. (*Burseraceae*).

Four species of *Boswellia* have been either described or collected in Africa west of Chad and the Central African Republic :

- *Boswellia papyrifera* (Del.) A. Rich. (Cent. Pl. Afr. 99, 1826 ; type : *Cailliaud s.n.*, Ethiopia) with paniculate inflorescences and bluntly acuminate leaflets, both with dense spreading pubescence. It occurs from the extreme east of northern Nigeria to the Red Sea.
- *B. occidentalis* Engl. (Bot. Jahrb. 46 : 292, 1912 ; type : *Ledermann 3191*, Cameroun, presumably destroyed) which is, according to ENGLER, closely related to *B. papyrifera*. Nothing in the description separates it from depauperate specimens of the latter species.
- *B. dalzielii* Hutch. (Kew Bull. 1919 : 137 ; syntypes : *Dalziel 279* (K) & *340* (K) from Yola, Nigeria), with racemose inflorescences and long-acuminate leaflets, both glabrous or nearly so, the hairs of which, if present are appressed. It occurs from Ivory Coast and Upper Volta to Chad and R.C.A.
- *B. odorata* Hutch. (Kew Bull. 1910 : 138 ; type : *Dalziel 167* (K) from Yola, Nigeria). Inflorescences as *B. papyrifera*, leaves as *B. dalzielii*.

The following observations can be made on *B. odorata* :

1. The inflorescences and the leafy shoots on the type-specimen are not and have not been attached to each other.

2. No other specimen shows the combined characteristics of *B. odorata* on one single part of a plant.

3. *B. odorata* does not appear to be even closely related to *Boswellia* spp. other than *B. papyrifera* and *B. dalzielii* on the African continent.

B. odorata can be either :

1. An extremely rare species (only the type specimen !). The present author has searched for *B. odorata* in Northern Cameroun and the adjacent part of Nigeria for years and only found *B. papyrifera* and *B. dalzielii*.

2. A hybrid : this is extremely unlikely in view of the fact that there is nothing intermediate in either inflorescence or leaves, or

3. based on a mixture of *B. papyrifera* and *B. dalzielii*, although it cannot be proven that the inflorescences and the leafy shoots did not originate from a single plant.

The present author supports the third hypothesis, in favour of which can be said :

1. *B. papyrifera*, although not cited in the Flora of West tropical Africa, does occur in the region east of Yola in Nigeria, the area of origin of the type of *B. odorata*.

2. *B. papyrifera* is found almost exclusively within the habitat of *B. dalzielii* — rocky slopes — and is usually found in company of the latter.

3. Both species usually flower in the same season when leafless, making such mixtures possible.

4. The bark of *B. papyrifera* — light brown, flaking off in large papery sheets — is quite distinct from the bark of *B. dalzielii* — greyish yellow with much smaller papery sheets — but as *Dalziel 167* was collected in or near a fence, this characteristic may have been obscured by mutilation.

It is postulated that *B. odorata* Hutch. is based on a mixture of *B. papyrifera* (Del.) A. Rich. (flowering parts of *Dalziel 167*) and *B. dalzielii* Hutch. (leafy parts of *Dalziel 167*).

The status of the *Boswellia* spp. west of Chad and R.C.A. is thus :

***Boswellia papyrifera* (Del.) A. Rich.**

— *B. occidentalis* ENGL., Bot. Jahrb. 46 : 292 (1912), *syn. nov.* ; neotype : *Geerling 5564*, Cameroun (WAG).

— *B. odorata* HUTCH., Kew Bull. 1910 : 138, *p.p.* (the flowering parts of the type, *Dalziel 167*), *syn. nov.* ; lectotype : *Dalziel 167*, flowering parts (K).

***Boswellia dalzielii* Hutch.**

— *B. odorata* HUTCH., *l.c.*, *p.p.* (the leafy part of the type, *Dalziel 167*), *syn. nov.*

SPECIMENS EXAMINED : ***B. dalzielii*** : GHANA : *Kitson 637*. — UPPER VOLTA : *Aubréville 2197*, *2687* ; *Chevalier 2197*, *2681*, *24424*, *24612*. — NIGERIA : *Dalziel 340* ; *Dent Young 26* ; *Foster 8*, *105* ; *Hepper 3864* ; *Lawlor & Hall 615* ; *Lely 176*, *698*, *811* ; *Lowe 1602* ; *Keay FHI 16152*. —

CAMEROUN : Aubréville 637, 771, 811, 855, 866, 873; CNAD 1351; Geerling 5562; Shaw 5558; Jacques-Félix 3396, 3636; Ledermann 3217; Letouzey 7362; SRFK 4339. — CHAD : Aubréville 684.

B. papyrifera : CAMEROUN : Aubréville 841, 864; Geerling 5557, 5561, 5564; SRFK 4337, 4338, 4446. — CHAD : Chevalier 8747, 9362; Gaston 810, 8747, 9362, 14632. — CENTRAL AFRICAN REPUBLIC : Le Testu 3773.

Information : congrès

REFERENCE

ASITAT : Association pour l'Étude Taxinomique de la Faune d'Afrique Tropicale.

GEERLING, C., 1982. — *Guide de terrain des ligneux sahéliens et soudano-guinéens*. Mededelingen Landbouwhogeschool Wageningen 82-3, 340 p.

Le présent ouvrage est le résultat de l'étude systématique exhaustive de la flore ligneuse des régions sahélo-soudanaises par des experts spécialistes des différents groupes végétaux. Les données de l'écologie, de la répartition, des utilisations et des usages locaux sont présentées de façon synthétique. Les auteurs ont pu constater que les ligneux de la région sahélo-soudanaise sont très riches en espèces et qu'ils jouent un rôle important dans l'économie locale. Les données de l'écologie, de la répartition, des utilisations et des usages locaux sont présentées de façon synthétique. Les auteurs ont pu constater que les ligneux de la région sahélo-soudanaise sont très riches en espèces et qu'ils jouent un rôle important dans l'économie locale. Les données de l'écologie, de la répartition, des utilisations et des usages locaux sont présentées de façon synthétique. Les auteurs ont pu constater que les ligneux de la région sahélo-soudanaise sont très riches en espèces et qu'ils jouent un rôle important dans l'économie locale.

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